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## ABSTRACT

This report describes a faculty development project carried out from 1978 to 1980 at Simon's Rock of Bard College, an experimental program for the younger than average college student. The project had three aims: (1) to develop practical methods of determining a student's position with respect to cognitive, moral, and ego development and to track entering freshmen across the first 2 years of their college experience, (2) to introduce faculty and administrators to cognitive-developmental theory and applications, and (3) to critique existing courses and co-curricular activities specifically addressed to meet students' developmental needs. The report provides a summary of the project, a project overview, and general background information. Three major interrelated components of the project are then reviewed: (1) student assessment; (2) faculty development; and (3) curriculum and program development. Finally, research outcomes of the project are discussed. These focus on the issues of student psychological development and curriculum (including planning, class size, assignments, advising, extracurricular and community life, perspectives on women, and general education). Other grant activities carried out under the faculty development grant are also briefly described. (WAM)

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MEETING THE DEVELOPMENTAL NEEDS  
OF THE EARLY COLLEGE STUDENT

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## MEETING THE DEVELOPMENTAL NEEDS OF THE EARLY COLLEGE STUDENT

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### A. Project Overview

In the fall of 1978, Simon's Rock of Bard College received a two year FIPSE grant of \$94,400 to allow faculty and administration of the College to gain a better understanding of the cognitive and affective characteristics and patterns of growth of their younger-than-average "early college" students. A faculty development program was instituted which trained faculty in developmental theory and applications as they redesigned courses and programs. A concomitant student assessment program was undertaken to determine student positions with respect to cognitive, moral, and ego development over the first two years of college. Our explorations of the role of education in the lives of mid-adolescent students and the processes by which enduring attitudes, values, and world views are formed, we felt, would have a generality beyond our college to any institution committed to student-centered education. Outcomes of the project have been disseminated by several publications and a national conference held in January 1981 at Simon's Rock.

### B. Purpose

The aims of the project were: 1) to develop practical methods of determining a student's position with respect to cognitive, moral, and ego development and to track entering freshmen across the first two years of their college experience, 2) to introduce faculty and administrators to cognitive-developmental theory and applications, and 3) to critique existing courses, programs, and policies and to design courses and co-curricular activities specifically addressed to meet the developmental needs of students at the college.

### C. Background

Simon's Rock was founded in 1964 as an experiment in education and was based on the assumption that many young people are ready to go to college earlier than the traditional educational lockstep allows, that is, after only two or three years of college. Several years experience with the diverse expectations, behaviors, and attitudes of the relatively young student body led faculty to the recognition that they needed to know a great deal more than they did about adolescent development in order to be truly responsive to the needs of the students. The project was formulated within the cognitive-developmental paradigm since recent work by the already existing Office of Student Evaluation at Simon's Rock and at research centers elsewhere had indicated that cognitive-developmental theory could be translated into a viable educational ideology which emphasizes not just intellectual but psychological and ethical growth as well. <sup>high school (?)</sup>

#### D. Project Description

Over the course of the two years of the project, all faculty members and most of the administration were introduced to developmental theory (Piaget, Perry, Loevinger, and Kohlberg) in a series of faculty workshops, led in some cases by outside consultants. Discussion centered on the relevance of developmental theory to Simon's Rock educational concerns and curriculum planning efforts. The interest generated at the early workshops made it possible to involve an unexpectedly large number of faculty in project activities. Over the two year period, faculty or faculty/student working groups were formed across disciplinary lines to explore, from a developmental perspective, such topics as general education, student writing problems, the teaching/learning process in the classroom, women's studies, faculty and student evaluation, freshmen requirements, admissions interviewing and criteria, residence hall programs, and judicial actions.

Simultaneously with the faculty workshops, three faculty members responsible for the student assessment program collected information on the developmental characteristics of 1978 and 1979 freshmen. The 1978 class was followed through the end of their sophomore year to assess changes in the structure of thought, sense of self, values, and life priorities. A combination of paper and pencil tests and intensive interviews were used. Results from the student assessment were reported to the faculty work groups as soon as possible, although the lag time was often considerable due to the time required for data collection and analysis.

#### E. Outcomes and Impacts

A total of 67 freshmen (45 in 1978 and 22 in 1979) participated in the developmental assessment during their first semester at Simon's Rock. Of the 45 students from the 1978 class of 64 students, 33 were tracked for one year and 18 were tracked for two years. The assessment component of the project was complex and time-consuming. While it ultimately will prove useful to have extensive longitudinal data of students, such information came too late in the course of the two-year project to have much impact during the project's life time. What had more impact on faculty development were: 1) exposure to developmental theory, particularly the work of William Perry, which most faculty felt provided a very useful framework for thinking about student growth, 2) sharing teaching strategies, 3) articulating goals and strategies within the framework of a theory, and 4) attempting modifications in individual courses according to developmental principles. In addition to introducing a shared developmental framework and vocabulary to the College, there were other specific outcomes: a two-year sequence of courses called Perspectives on Women which was planned to take into account the developmental status of students from point of entrance to the end of the sophomore year; guidelines for a two-year course sequence which is applicable for a variety of content issues in a general education program; a develop-

mental interview and checklist for use in the admissions office and designed to elicit information related to Perry, Loevinger, and Kohlberg states. These results and outcomes have been presented at a variety of professional educational conferences and workshops (including William Patterson College Conference on General Education, Massachusetts Association for Institutional Research, National Association of College Admissions Counselors, FIPSE Project Directors Meeting, Harvard Educational Review, and Denver Conference on Adult Learners). Several publications are available upon request. Simon's Rock project staff were also initiators of a national network of Perry researchers which has been meeting annually for the past three years. In January 1981 Simon's Rock hosted a national conference called The Case for Educational Restructuring which was conceived as a result of the FIPSE-funded study of the developmental needs of early college students. The three-day conference was attended by educators, national policy-makers, and representatives from foundations, corporations, and accrediting agencies. A publication of the proceedings is available by writing: Nancy Goldberger, Simon's Rock of Bard College, Great Barrington, MA 01230.



## PROJECT OVERVIEW

This project grew out of a felt obligation of Simon's Rock faculty and administration to gain a better understanding of the cognitive and affective characteristics and patterns of growth of their unusual student body. The College was founded in 1964 as an experiment in education and was based on the assumption that many young people are ready to go to college earlier than the traditional educational lockstep allows; after only two or three years of high school. Students are admitted to the College's two-year A.A. program or four-year B.A. program before receiving a high school diploma; at an average age of sixteen to seventeen. As originally conceived, Simon's Rock was founded as a college not just for the intellectually precocious but for any academically able and serious student. However, several years experience with the diverse expectations, behaviors, and attitudes of the relatively young student body led faculty to the recognition that they needed to know a great deal more about adolescent development in order to be truly responsive to the needs of the students.

It was at this point in 1978 that a proposal was approved by FIPSE for a two-year project which would allow faculty to become trained in developmental theory and applications as they redesigned courses and programs. A concomitant student assessment program was undertaken to determine student positions with respect to cognitive, moral, and ego development. The project was formulated within the cognitive-developmental paradigm since recent work had indicated that cognitive-developmental theory could be translated into a viable educational ideology which emphasized not just intellectual but psychological and ethical growth as well.

An additional consideration in undertaking this project was our belief that Simon's Rock Early College was an ideal setting for examining the important issue of psychological vs. intellectual readiness for college. Recent statistics have shown that the age range spanned by the college years is shifting downward as well as upward (i.e., adult education). We felt our explorations of the role of education in the lives of students, the catalytic events that bring about change, and the processes by which enduring attitudes, values, and world views are formed, would have a generality beyond our college to any institution committed to student-centered education.

Over the course of the two years of the project (1978-1980), all faculty members and most of the administration were introduced to developmental theory (Piaget, Perry, Loevinger, and Kohlberg) in a series of faculty workshops, led in some cases by outside consultants. Discussion centered on the relevance of developmental theory to Simon's Rock educational concerns and curriculum planning efforts. The interest generated at the early workshops made it possible to involve an unexpectedly large number of faculty in the pro-

ject activities. Over the two year period, faculty or faculty/student working groups were formed across disciplinary lines to explore, from a developmental perspective, such topics as: general education; student writing problems; the teaching/learning process in the classroom; women's studies; faculty and student evaluation; freshman requirements; admissions criteria; residence hall programs, and judicial actions.

Simultaneously with the faculty workshops and work groups, three faculty members responsible for the student assessment program collected information on the developmental characteristics of the 1978 and 1979 freshmen and seniors. The 1978 freshman class was followed through the end of their sophomore year to assess changes in the structure of thought, sense of self, values, and life priorities. A combination of paper and pencil tests and intensive interviews were used. Results from the student assessment were reported to the faculty work groups as soon as possible, although the lag time was often considerable due to the time required for data collection and analysis.

### BACKGROUND

Simon's Rock of Bard College was founded in Great Barrington, Massachusetts, in 1964 as Simon's Rock Early College. Our affiliation with Bard began in 1979. The College accepts capable 10th and 11th grade students into a college liberal arts program characterized by small classes, extensive contact with faculty in and out of the classroom, and opportunities for independent work on and off campus. Students can elect an A.A. degree after two years of study or complete a B.A. degree in four years. The size of the student body has consistently been between 200 and 250 each-year with 60-70% females.

During the lifetime of the project, the curriculum was organized into six interdisciplinary majors with relatively few distribution requirements. The 27 full-time faculty can be characterized as young, dedicated to teaching, and accustomed to self-examination and innovation. Approximately 80% have Ph.D.s in their fields of specialty. The faculty are organized according to major rather than the more traditional department structure. Indeed, many faculty members are one person departments and teach a wide range of courses usually taught by separate individuals in more traditional settings. The normal teaching load is four courses per 13-week semester and one course offering during a four-week Spring term. Service on committees, advising, and supervising extracurricular activities round out the institutional expectations. Most faculty would probably describe their jobs as intense but quite rewarding. There is no tenure system although after five years at the College the institution may offer a ten-year contract.

Because of Simon's Rock's unique position in higher education, an Office of Student Evaluation was established in 1973 to study the cognitive and affective development of students and to determine some



of the factors underlying successful academic and social adjustment at an early college. Each year from 1973 to 1978 students were tested for critical thinking ability (the Watson-Glaser Test) and ego development (Loevinger Sentence Completion Test). Prior to the start of the FLPSE project, the Director of Evaluation, who later served as one of the project directors, conducted workshops for faculty to provide information about the Simon's Rock students. These activities formed a basis for the emphasis on developmental descriptions contained in the project.

Most faculty who participated in grant activities did not receive release time. They continued primarily because a sense of their own development as teachers was important to them. Perhaps an additional factor involved the relative ease with which courses can be modified, redesigned, or added to the curriculum at Simon's Rock. Although new courses must be approved by the Academic Policy and Planning Committee, it often takes only a semester to install a new course in the program. Departmental politics is virtually absent and communication among faculty is remarkably open. The project activities served to increase the degree of cooperation among faculty who began to feel even more comfortable with one another as they shared ideas about teaching.

Project activities tended to structure the already existing faculty interests in the nature of interdisciplinary education, general education, and teaching problems related to the needs of the early college student. Workshops consistently drew 75% of the faculty. A core of approximately 30% were more intimately involved over the two year span and will probably remain committed to a continuing exploration of these critical issues. A core of faculty, about 20%, evidenced little or no interest in developmental theory or project activities.

#### RATIONALE FOR PROJECT

The project emerged gradually from the efforts of an ad hoc committee which was given the broad charge of reviewing the Simon's Rock curriculum. In our discussions we hoped to define better the nature of interdisciplinary study, clarify learning objectives throughout the four-year sequence leading to the B.A., and begin to address the issue of a general education component in the Simon's Rock curriculum. It became clear that our discussions of such complex issues should be informed by theoretical notions which relate directly to the students themselves and we chose to focus on the developmental scheme outlined by William Perry in his book Forms of Intellectual and Ethical Development in the College Years.

Perry's framework was immediately appealing. As faculty, we knew that students differed but our descriptive vocabulary was not only weak but it also did not offer us means to effect changes in the curriculum, ourselves, or our students. While not prescriptive, Perry's scheme offered us a chance to escape the simplistic labeling of students as bright-dull, motivated-unmotivated, mature-immature.

It helped us make sense of student diversity in ways unrelated to traditional aptitude measures. And it helped us understand the wide range of reactions to ideas or assignments which we had often observed.

From past studies done by the Office of Evaluation at Simon's Rock, we knew that a student's level of ego development (Loevinger) could be an important predictor of academic and social success. We hoped to begin to understand the relationships between intellectual development and ego development. We also became concerned with the role of the curriculum in supporting the development of moral reasoning (Kohlberg).

Our focus on psychological theories of intellectual, moral and ego development appeared to be advantageous since: 1) all faculty would agree that students are expected to develop in college, 2) the notion of change as a progression through stages mitigates against the use of labels which imply no possibilities for change, and 3) the theories suggest that growth occurs when existing cognitive and emotional structures are challenged in an environment which provides support for the student to proceed to a more complex understanding of himself and his world. We were also convinced that an uninformed vision of a liberal arts education, general education or even a sequence of assignments within a course might contribute to an environment which, for some students, would encourage stasis or even regression in developmental terms.

Given that brief background, the problems addressed by the project can be best appreciated by reviewing its intended outcomes. We wished to accomplish the following: 1) obtain a comprehensive understanding of the developmental stages of our students (Perry, Kohlberg, Loevinger) by means of an assessment program of testing and interviews; 2) track students on these measures through their sophomore year to explore the catalytic events in their lives which they felt have contributed to their intellectual growth and their sense of identity; 3) determine the kinds of academic and extracurricular experiences best suited to students at different levels of development; 4) determine how developmental theory can help faculty organize their observations about students and make reasonable adjustments in teaching style and course content; and 5) suggest modifications in the academic program and cocurricular activities which take account of cognitive, moral and ego development. In broad terms there were three major interrelated components to the project: 1) student assessment, 2) faculty development, and 3) curriculum development.

#### PROJECT DESCRIPTION

The project operated with a total budget of \$95,000 over the two-year period (\$45,000 in Year 1; \$50,000 in Year 2). One of the major expenditures of the grant was for salaries (release time) of the personnel who initiated and supervised the grant activities.

The director of the grant was the College's Director of Student Evaluation and member of the Social Science faculty who devoted half-time to the project in the first year and full-time the second year (half her salary the second year was contributed by Simon's Rock). The co-director was a member of the Social Science faculty who spent half-time on the grant (a quarter of his salary was contributed by Simon's Rock). A member of the Humanities faculty spent half-time the first year and a quarter time the second year. These three persons were responsible for all of the student assessment program (testing, interviewing, scoring, and data analysis) and for organizing the faculty development activities. They also participated in most of the curriculum and program development activities during the two-year period.

### Student Assessment

The theoretical framework for the assessment approach, and indeed for all of the grant activities, was cognitive-developmental, as elaborated in the work of Piaget, Kohlberg, Perry, and Loevinger. The basis of the cognitive-developmental position is the principle of cognitive stages which states that 1) there are qualitatively different modes of thinking at different ages, 2) that these different modes of thought form an invariant sequence of stages in individual development, and, while cultural factors may speed up, slow down, or stop development, they do not change its sequence, and 3) the stages are hierarchically organized in that each stage stems from the previous stage and prepares the way for the subsequent stage. As opposed to maturational theories of development which stress a gradual unfolding of innate potentialities, and environmental theories which stress stimulus contingencies which lead to the learning of socially-approved modes of behavior, cognitive-developmental theory is based on the premise that cognitive and affective structures emerge from the interaction of the individual and the environment under conditions that foster or allow growth and change. From this perspective, the function of education is not simply the direct transmission of cultural information and rules (the environmentalist position) or the provision of a free and permissive climate in which inner abilities and virtues will unfold (the maturationist position). The cognitive-developmentalists, given their assumption of a natural sequence of intellectual and moral stages, claim that the aim of education should be the stimulation of the next step of development. Adequate stimulation for any individual requires an understanding of the individual's stage of functioning, challenge to the existing structures and assumptions in an atmosphere of support, and exposure to modes of thought one step beyond the individual's own level.

In this project approximately \$12,000 of the total budget was spent on student assessment. A total of 67 freshmen (45 in 1978 and 22 in 1979) participated in the intensive developmental assessment during their first semester at Simon's Rock. Of the 45 students from the 1978 freshman class of 64 students, 33 were tracked for one year and 18 were tracked for two years, that is, until the

end of their sophomore year. Student attrition from the assessment project can be accounted for as follows: 16 students left Simon's Rock before the end of their sophomore year, 3 students refused to participate after initial testing, and the remainder were dropped from the sample because of scheduling problems or equipment failure.

A total of 12 seniors out of a possible 24 from the classes of 1978 and 1979 were given the assessment interviews and tests. In general, it proved to be more difficult to arrange interviews with the seniors than the lower classmen because of their heavier schedules. Seniors also tended to request more extensive information about the objectives of the project, the way in which the data would be used, and feedback about our interpretation of their developmental status. We found that the best strategy for enlisting student participation, whatever their year in college, in a project such as this was to be straightforward about our motives, the theoretical framework, and the results of the individual assessments. Students, at least at Simon's Rock, are resistant to being used as "guinea pigs" and are most receptive when treated as collaborators rather than research subjects.

The following developmental information was obtained from participating students:

- 1) Ego developmental stage determined by means of the Loewinger (Washington University) Sentence Completion Test. This is a 45 minute paper-and-pencil test that must be scored by trained raters. All incoming students in 1978 and 1979 took this test.
- 2) Formal thinking as measured by the Watson-Glaser Test of Critical Thinking, a paper-and-pencil test which takes approximately one hour to complete. All incoming students in 1978 and 1979 took this test.
- 3) Formal thinking as measured by the University of Nebraska/Lincoln ADAPT test. This paper-and-pencil test was given to the freshman class of 1978 but dropped the second year because of redundancy and unreliable scoring.
- 4) Perry stage of intellectual development as determined by a specially designed student two-hour interview (see Appendix A). Special questions within our interview were drawn from a Perry interview designed by Clinchy and Zimmerman at Wellesley College. The designation of a Perry stage was made by three independent, trained interview raters from Simon's Rock. Discrepancies were resolved by discussion. The interview was chosen over the commonly used Perry paper-and-pencil measure developed by Knefelkamp at University of Maryland known as the KNIWI because we had found in an earlier study that the KNIWI underesti-



7.  
mated stage position. The interview also elicited far richer information on student attitudes and thinking processes and was more appealing to the students themselves. We now have Perry change scores on 33 students over a one-year period and 18 students over a two-year period.

- 5.) Stage of moral reasoning as determined by the standard Kohlberg interview on hypothetical moral dilemmas. The Kohlberg section of the two-hour interview was scored on 48 freshmen from 1978 and on the 18 students who were reinterviewed at the end of their sophomore year.
- 6.) Learning style as measured by the Omnibus Personality Inventory (OPI). This hour-long paper-and-pencil test was only introduced into the assessment battery in 1979 as a result of Simon's Rock participation in a national consortium of colleges involved in student/faculty development activities under the direction of Mildred Henry at New College of California and Joseph Katz of SUNY/Stony Brook. All incoming freshmen in 1979 took the OPI. Results from the student OPIs were the basis for formation of student/faculty discussion groups to be described later under Faculty Development.

The student assessment program was one of the most informative and personally gratifying aspects of the grant activities for those faculty who were responsible for it. Unfortunately, as originally conceived, only 3 faculty were budgeted to do the assessments; the bulk of the faculty heard about the results second-hand. In retrospect, had more faculty been responsible for student interviewing, not only could it have been completed sooner, but the faculty themselves could not help but be changed and enriched by exposure to students in the interview setting. We now find ourselves in the position of having a wealth of fascinating data on students which is just being completed and compiled and only three persons who are truly aware of its value.

Some of the main results from the student assessment and generalizations relating developmental status of students to educational programming can be found in the Outcomes section of this report.

#### Faculty Development

Approximately \$8,000 of the two-year budget went to faculty workshops and consultants. Perhaps the most important consideration in designing developmentally-based educational programs concerns the faculty development that precedes planning. Too often faculty members at the college level assume that the students who reach their classrooms are already capable of critical thought and able to deal with whatever level of abstraction and theory the instructor feels is appropriate to the course objectives. If stu-

dents are not thinking critically; faculty tend to relegate the problem to remediation instructors. Similarly, asking faculty to become sensitive to, and cope with, students' struggles with identity or values dilemmas is asking them to step into territory usually reserved for college counselor or Dean of Students, and many college instructors retreat from such psychologically-tinged involvements with students. Thus, the first question in planning faculty programs focused on student development is how best to introduce the topic and the theory in order to stimulate meaningful discussion and minimal resistance.

At Simon's Rock, we were fortunate in having a faculty who had already had some exposure to developmental theory and application because of earlier studies by the Office of Student Evaluation. The project directors did not have to work hard to elicit interest and commitment to the grant activities. Over the two years, however, faculty interest in the project fluctuated and took unexpected turns so that the outcomes of the project were somewhat different from those anticipated. A chronology of the various faculty development activities can best describe the vicissitudes of translating developmental theory into practice.

Year One. An August 1978 workshop attended by the entire teaching faculty at Simon's Rock introduced the proposed project activities. The major developmental stage theories (Perry, Kohlberg, and Loevinger) were reviewed. Discussion centered on the relevance of developmental theory to Simon's Rock educational concerns and curriculum planning efforts. It is important to note that most faculties tend to respond more favorably to Perry's theory than to Kohlberg and Loevinger, since his descriptive scheme focuses on student attitudes and behavior that are apparent in any college classroom. Perry's framework for understanding student differences organizes, for most people, things they already know but often poorly understand or cannot articulate. In addition, his scheme describes the developmental course in the maturation of thought and thus gives clues as to what has preceded and may follow in the process of growth.

Following the introductory workshop, a group of six faculty (from Mathematics, Environmental Studies, Political Science, Psychology, Literature, and Art) began meeting each week with the project directors. Initially, the instructors observed students in their classes in an effort to observe behaviors which could be related to Perry's stages. The exchange of these observations proved to be a valuable exercise which served to focus our attention on student differences in classes. It was a supportive atmosphere which facilitated the exchange of problems (many of which, the faculty discovered, were held in common) and of possible solutions. Some faculty made minor revisions in the nature of class assignments or course content on the basis of these discussions. Each member of this core group of faculty began to report back to their respective divisions, and through the divisional meetings, part of the agenda for the next workshop evolved.



In January 1979, twenty faculty (out of 27) attended a two-day workshop which included two outside consultants: Mildred Henry from New College of California and the FIPSE-funded PAIDEIA project, and Charles Hoffman of SUNY/Stony Brook from their FIPSE-funded Master Learner project. Ms. Henry spoke about her work on student development and learning styles and Dr. Hoffman spoke about his experiences with the general education and related Master Learner programs at Stony Brook. There were also reports from the divisions on the status of divisional efforts to incorporate developmental theory in curriculum planning. The Science division led a discussion of the developmental differences between Pre-medical and Environmental Studies majors and asked whether these differences were being addressed in the classroom; Social Science focused on the nature of developmental changes and asked whether these changes were reflected in our senior year expectations; Arts and Aesthetics discussed the issue of student subjectivity as a teaching problem; and English instructors considered the content vs. process issue in the selection of reading assignments, and began a discussion of student writing problems in an effort to discover whether these problems were developmentally based.

Four major issues emerged from the January workshop: 1) how can a growing knowledge of student development inform discussions on general education, 2) are there developmentally based objectives for 100-level through 400-level courses, 3) how can an institution provide opportunities for constructive feedback to individual faculty members concerning developmentally based teaching problems, and 4) how are student writing problems related to developmental stage.

By the end of the first year of the grant, almost one-half of the Simon's Rock faculty were actively working together on these questions. Although interest in general education and student writing was high, faculty attention at this point was greatly diverted by the merger of Simon's Rock and Bard College and the subsequent introduction of a new Transitional Studies Program (TSP) for ninth graders (pre-collegiate) which was to be developed and in place by the coming fall.

Year Two. We began the 1979 Fall semester with a faculty workshop focused on general education and development. Mildred Henry was our outside consultant. The FIPSE committee on general education reported to the faculty the results of a survey of faculty attitudes about general education at Simon's Rock. The survey indicated that there was a good deal of consensus that some kind of general education core program was desirable but there was the usual diversity on what the content of such a program should include. We did agree that the best planning was probably going to proceed in the smaller groups of faculty who were most committed to the idea. Developmental guidelines were prepared for the general education planning group (Appendix B).

A winter writing workshop for faculty was held in January 1980. An outside consultant, Eloise Blanpied from Ithaca College,

reported on her FIPSE-funded writing project and began the discussion of student writing development. As a result of this workshop, a writing clinic was set up for faculty that met during the spring of 1980 under the direction of two of our FIPSE staff from psychology and humanities. The participants, approximately one-quarter of the full-time faculty, brought in writing assignments and samples of student work for group discussion. Discussion topics included: subjectivity/objectivity in student papers; problems in organization and development of arguments; structure and spacing of writing assignments; and the evaluation of assignments.

Another aspect of faculty development activities grew out of our participation in the Henry-Katz FIPSE-funded PAIDEIA project. Having included the Omnibus Personality Inventory in the 1979 freshmen assessment battery, we selected approximately 20 of these freshmen from five different courses to meet bi-weekly with the course instructor and a faculty member who was auditing the course. These five small groups of faculty and students met throughout the academic year to talk about the teaching/learning process. Faculty and students shared their own OPI results with each other so that group discussions could focus on differences in intellectual style, academic motivation, assumptions about the nature of knowledge, and mutual expectations in the classroom. The faculty auditor who attended the class regularly, met periodically with individual students and the course instructor to offer constructive feedback about the class. This kind of interaction among faculty and students has been so successful that we are considering continuing the small group meetings with new faculty/student participants in the future.

### Curriculum and Program Development

Beginning as early as the Fall of 1978, faculty began to use their new understanding of student development to modify their own courses. Some faculty adopted some of Kohlberg's techniques for stimulating moral discussions around the moral dilemmas that grew out of the course content, for instance, the ethical controversies in Environmental Studies, Political Science, and Human Biology. Several faculty made dramatic changes in the degree of structure and support provided in their introductory courses (more detailed syllabi, explicit deadlines, shorter and more frequent assignments, minimal use of texts which survey contradictory theories without analysis or synthesis, use of exercises to promote self-reflection in students, frequent feedback with individually tailored assignments when possible). Faculty also reported that one of the benefits of a developmental perspective was that it made them more sensitive to students in classroom discussions and advising sessions (that is, more aware of how a student's comments and behavior emerge from his epistemology). Faculty reported, as a general rule, that participation in the FIPSE activities had made them more effective teachers, advisors, and mentors. However, faculty did occasionally express frustration over having no clear ideas, guidelines, or (at worst) "cookbook" for translating devel-

opmental theory into practice. It is probably true that any faculty, deliberately setting out to use developmental theory in educational planning, has some unrealistic visions of an ultimate product. In a project such as this one, although there are "products" to point to, we feel that the most profound effects involved transformations in individual perspectives on what teaching and learning is all about; that, at best, it is a humane, mutually rewarding, and growth inducing process for all involved.

## OUTCOMES

### Student Development

At Simon's Rock, we have turned to developmental theory to help us understand how students think during the college years. One such scheme was introduced by William Perry, a psychologist at Harvard. Perry's work represents, in part, an extension of Piaget's concern for cognitive development up to the years of early adolescence and the attainment of formal thought. Perry describes the changes -- both dramatic and subtle -- in college students' assumptions about the origins of knowledge and values and the eventual formation of personal commitments in a pluralistic society. He outlines a movement across nine positions or stages from a position of "dualism" where the student views the world in polarities of right/wrong, we/they, and good/bad, and believes in external authority as the fountain of truth. The highest stages are the "relativistic" positions where all knowledge and values are seen as contextual or relativistic within which affirmation of personal identity and commitment evolve. In the process of moving from dualism to relativism, students pass through intermediate "multiplistic" positions where faith in authority is shaken as a result of the increasing awareness of diversity of opinion and multiple perspectives on the good and the right. It is only gradually that a student comes to understand that authorities may not have the right answers, that experts may disagree, that the old formula of honest, hard work does not necessarily result in good grades, and although professors acknowledge varying opinions, some of them evaluate and grade as though their own opinions are "right." Growing through these stages of doubt and experimentation can be stressful as anyone knows who has found his own ideas and values crumbling around him.

While moving through the intermediate, "multiplistic" stages, there may be periods of rebellion against authority as the individual begins to grow beyond dependence. Sometimes this restiveness may be antisocial, and educators, parents, and other "authority figures" have to weigh carefully those adolescent actions which represent legitimate exploratory self-expression and those which are so antisocial as to warrant punishment. Often students in the middle stages will have trouble seeing the distinction between a mere opinion and a carefully supported opinion. They will

argue recklessly or claim that there is no right or wrong; everything is simply a matter of opinion.

Refusal to judge others and insistence on "doing your own thing" are popular manifestations of multiplistic thinking. Just as the person at this stage sees no valid grounds on which to evaluate the beliefs and behavior of others, so too does he retreat from an analytical, evaluative approach to ideas, often adopting an anti-intellectual stance in the classroom.

The following figures represent the percentages of our student sample at the four main Perry-stage positions as scored from our interviews. Sixty-seven were interviewed at the beginning of their freshman year though only eighteen were interviewed through the end of the sophomore year.

	Dualist	Multiplistic	Pre-rel.	Rel.
n=67 Freshman	25	39	27	9
n=31 End Freshman	6	45	29	19
n=18 End Sophomore	5	26	26	42

Although one-quarter of our sample were scored Perry dualists at entrance, by the end of the freshman year, many had moved to the multiplistic stage. The major shift during the second year of college appears to involve shifts from the multiplistic and pre-relativistic stages into relativism.

The movement through stage positions can be seen more easily in Figure 1 for 31 students for whom we have at least two interviews; 18 of those students were also interviewed at the end of their sophomore year. In this figure, the major stages are broken down into sub-stages; two scores indicate a transition between stages with the minor score in parentheses (for example, a 4(5) score indicates that a student at Position 4 is beginning the transition into Position 5). Regression in five students is indicated by an arrow. Four students who were below the stage of commitment failed to advance as a result of one year of college while two students remained at their entering position after two years of college work. Of the students who reached the stage of relativism at the end of one or two years, all had entered at least at the higher multiplistic stages and all except one were scored at a pre-relativistic stage at least once prior to their final interview. Most students advanced one full stage per year.

We also obtained OPI information for a small sample of students for whom Perry stage scores were available. As a group, dualists scored lowest on all intellectual scales which measure reflective thinking, appreciation of complexity, as well as a tendency to organize within known categories of thought, and perception of an esthetic dimension. They scored lowest on autonomous thinking and displayed a closed emotional pattern which, taken together with

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1.....2.....
1.....
1.....
1.....
1.....
1.....
123

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.....3  
 .....2.....3  
 .....23.....23  
 .....2  
 .....2

1.....2.....	3.....
1.....2.....	
1.....	

12 ..... 3  
12 ,

1.....	2.....	3.....
1.....2		
12		

1..	.....2.....	.....3
123		
1..	.....2.....	.....
12		

2 ←	1	3
2 ←	1	3
	1	3 ←      21
	1	2

2 ← ..... 3 ..... 1  
1 ..... 2 ..... 3  
12

1. . . . . 2. . . . . 3. 20  
1. . . . . 2. 3

$$2 \leftarrow \dots \dots \dots 1$$

1.....2

Figure 1.

PERRY STAGE CHANGE OVER THE FIRST TWO YEARS OF COLLEGE (Simon's Rock)



their intellectual profile, suggests a decreased willingness to take risks and to explore. They also scored lowest on the altruism dimension and highest on the scale which indicates a tendency to approach new experience with an eye toward a more practical outcome.

Conversely, a small group of relativists combined an appreciation for complexity with an ability to reflect about thought, a high level of autonomous thinking, and a willingness to take risks and explore areas without the necessity of their leading to some practical outcome. As a group, these students most resembled the composite faculty OPI profile.

Our information concerning ego development (Loevinger) is not longitudinal since most students appeared reluctant to take the test at the end of their sophomore year. We grouped the stages for our freshmen into three major categories: 1) Pre-conformist which includes Loevinger's impulsive and self-protective stages where impulses are acted upon rather than controlled for the sake of social order and thinking is stereotyped, simplistic and dichotomous; 2) Conformist which includes the conformist and transitional self-aware stages where there is an emphasis on conformity to group standards and values, and a preoccupation with social acceptability and appearance; and 3) Post-conformist which includes Loevinger's conscientious, autonomous, and integrated stages where there is an increasing concern for self-evaluated standards and internally defined goals. The following figures refer to the percentages of our male and female freshmen at entrance:

	<u>Pre.</u>	<u>Conf.</u>	<u>Post.</u>
Female	2	61	37
Male	23	68	9

We have consistently been impressed with the relationship between developmental levels (Perry, Loevinger) and success in school. Figure 2 compares developmental levels and SAT scores as predictors of first-semester GPA. While there is a relationship of SAT to GPA, high Perry scores predict higher GPA while low Loevinger scores predict low GPA relative to SAT. We do not find a linear relationship between the two developmental measures. One factor which appears to preclude such a correlation results when many students at Perry's 4MC stage are scored as Loevinger Pre-conformists. We have only recently begun examining all of these factors with respect to Kohlberg stages.

### Curriculum Development

The influence of Perry's work is clear in much of the curriculum planning at Simon's Rock. The common goal is to help students move away from simplistic, absolutist thinking, and away from the "multiplicitic dilemma" of believing that all opinions are equally valid, a



PREDICTORS OF FIRST SEMESTER GRADE POINT AVERAGE

Simon's Rock of Bard College

SAT SCORES (Verbal and Math Combined)

<u>Freshmen</u>	<u>990</u>	<u>990-1090</u>	<u>1100+</u>
1977-78	2.13 (C)	1.84 (C-/C)	2.69 (B-)
1978-79	2.35 (C+)	2.48 (C+/B-)	2.95 (B)
1979-80	2.57 (C+/B-)	2.56 (C+/B-)	2.61 (B-/C+)

PERRY STAGES

<u>Freshmen</u>	<u>Dualist</u>	<u>Multiplist</u>	<u>Relativist</u>
1977-78	1.68 (C-)	2.20 (C+)	3.40 (B+)
1978-79	2.43 (C+)	2.58 (C+/B-)	2.74 (B-/B)
1979-80	2.27 (C+)	2.26 (C+)	3.30 (B+)

LOEVINGER EGO STAGES

<u>Freshmen</u>	<u>PreConformist</u>	<u>Conformist</u>	<u>PostConformist</u>
1977-78	1.16 (D)	2.38 (C+)	2.55 (C+/B-)
1978-79	2.11 (C)	2.67 (B-)	2.39 (C+)
1979-80	1.71 (C-)	2.68 (B-)	2.76 (B-/B)

position leading to irresponsibly subjective choices... "What feels right to me." Stated positively, the educational goal is Perry's "contextual relativism," a recognition that difficult questions have multiple answers but that within such relativism one can nonetheless make reasonable choices and formulate enduring commitments.

Planning the Curriculum. Every year some proportion of our entering freshmen class, usually less than 25%, can be described as not yet fully formal in logical thinking; conformists who are overly reliant on and susceptible to externally-derived standards and mores; Kohlberg and, in Perry's terms, dualists. Classroom observations by our faculty have shown that students classified as dualists display the need for structure (that is, lecture as opposed to discussion) which, from the students' point of view, should also provide the right answers. Such students are often confused by contradictory information and are particularly upset when the professor's lecture diverges from the textbook. They are very critical of some textbooks, such as those which are so frequently found in the social sciences, in which an array of theories is presented without any direction as to how to choose the "right" theory. Team-teaching is a problem for these students since they do not know which teacher is the true authority. They are insecure in their own views, often very quiet in class, and have a great deal of difficulty accepting the distinction between quality as opposed to quantity of performance. In a course which emphasizes relativistic thinking, these students may try to learn what the teacher wants, but are unable to formulate general rules for quality argumentation. Their inability to succeed is often blamed on the teacher who they feel should supply answers which the student can learn. We have found that dualistic students gravitate to science and math where they feel right answers can be found. Too often teaching in the sciences reinforces this illusion by its over-emphasis on logical proof and experimental method and not on the context for scientific thought. Dualistic students tend to avoid the social sciences and the humanities which they perceive as arbitrary, disorganized, and even threatening. During an interview, one pre-med student spoke of dropping introductory sociology, saying:

I'm scared of social science courses.  
I haven't learned how to approach them...  
Who's to say what is right and what isn't?  
Science is more exact.

Surprisingly, subjectivism in the arts is not as disturbing to dualistic students since they consider painting, dance, or music to be a purely private experience, thus a legitimate undertaking.

The need for certainty may also influence the social behavior of these students. They tend to have stereotyped attitudes about acceptable behavior and to divide the world into in and out groups. The social and intellectual diversity confronted for the first time

at college may be eye-opening and liberating for some students, but, for others, may lead to a tendency to cling to familiar social groups and values.

In planning a curriculum for students at the dualistic stage, educators should be responsive both to the intellectual limitations, that is, the concreteness, passivity, and either-or thinking, and to the personal insecurity over venturing into unknown territory. As the student is challenged with diversity of opinion and multiple perspectives, he must be offered concurrently structure, direction, and emotional support. Instructors should not expect students to work independently; they need guidance, frequent assignments and feedback, clearly articulated objectives for the course and class assignments, and if at all possible, one-on-one debriefing sessions after each assignment.

These students indeed need to begin to deal with issues concerning values, choice, and responsibility but first in their daily life and in their immediate community. Their education should be concrete and personal; it should include "hands-on" experience, field and community-based projects, group assignments (as long as attention is given to group process), campus committee participation, volunteer programs, work/study programs. Skills development should be subsumed as a part of the over-all curricular emphasis on thinking about alternatives and choice.

The second category of students are those who can be classified as Perry multiplists. At Simon's Rock and probably at other liberal arts colleges, this is the modal position for freshmen students. Approximately 60-70% of our students are in this category. The multiplistic stage is a period of transition for the student -- often stressful as old assumptions crumble, often exhilarating as the student realizes he is no longer dependent on authority to supply the answers. However, when a student begins to view all knowledge as simply a matter of opinion, he becomes less and less willing to move beyond intuitive, subjective arguments. Simon's Rock seems to attract multiplists, students who already see themselves as out-of-the-mainstream, independent, unique individuals. Unlike dualists, they no longer mimic the teacher's opinions, but often insist that the students' opinions cannot be judged inferior to the teacher's. However, they are not yet able to make distinctions based on quality. The more oppositional students at this stage can be vocal and domineering in class, and instructors see them as hostile, opinionated, undisciplined, and disorganized. Faced with an essay question (or reading assignment or discussion topic) requiring a critique of two or more contradictory theories, the student multiplist takes a cafeteria approach to ideas, selecting what feels right and dismissing the rest as "somebody else's bag." As one might expect, grading and evaluation are suspect since, to the student, it's simply a matter of opinion.

A skills-oriented curriculum promoting the development of critical thought seems ideal for this group; the pedagogical focus

should be on the dilemma of subjectivity. The instructor should be prepared to challenge unsupported opinion at every turn, in classroom discussion and written work. Assignments should be designed with the explicit objective of helping students learn to recognize pre-suppositions in arguments and to distinguish relevance from irrelevance. A thorough grounding in the logic of one theory or point of view should be insisted upon before the student is allowed to compare one theory with another. The point should continually be made to the student that, until he understands the context for a particular point of view, choice among points of view is irresponsible. However, the instructor should also be prepared to cope with the emotional resistance when the multiplistic student is asked to evaluate or judge ideas, people, and arguments. His non-judgmental stance seems, to him, the only rational and legitimate position possible, and, even though he may be troubled by his own conclusions, he may cling to them.

It is during the process of learning the internal logic of major systems of thought, of becoming thoroughly acquainted with several theoretical perspectives on the same issue, that an epistemological "flip" can occur. As Perry puts it, the student begins to realize that contextual relativism is not so much a case of "how they want us to think" as "how the world is." Ideas can be compared as contextual and better-worse, rather than right-wrong.

This comparison of interpretations and thought-systems with one another introduces meta-thinking, the capacity to think about thought, including one's own. Theories become not truth, but metaphors or models, approximating the order of observed data and experience. (Perry)

Few students enter Simon's Rock already on the other side of the epistemological shift; that is, we have almost no freshmen relativists. Perry, however, reports that a number of freshmen come to Harvard having made the transition. In any event, by the junior and senior years, probably most students in liberal arts colleges are beginning to think relativistically. What are relativists like as students? At Simon's Rock, faculty perceive them to be responsive to criticism and able to use criticism in creative achievement rather than blindly accepting or rejecting a teacher's arguments. These students tend to view structure in a course as a springboard rather than a limit to inquiry. They enjoy lecture courses as well as seminars, although they express annoyance at the naivete of dualists and the diversionary tactics of multiplists in classroom discussions. One gets the impression, reading professor's comments about relativistic students, that they are markedly different from the rest of the class: mature, serious, and delighted by scholarship. Since most of us would probably agree that a class full of relativistic students is close to ideal, one might wonder, if, from the student's point of view, contextual relativism is experienced as the ultimate in intellectual and personal growth. Our

interviews with students suggest not. Once again, the dilemma of choice emerges as a profound and disturbing preoccupation. Whereas, for dualists, exposure to intellectual and social diversity simply open them up to the possibility of choice in their lives, for relativists, the dilemma is the choice among multiple contexts. As Perry and Erik Erikson have pointed out, the successful arrival at personal identity and meaning in one's life involves a commitment with relativism, that is, the act of faith, the affirmation of personal choices, after the long and stressful period of detachment, doubt, and awareness of alternatives.

A humanities-oriented general education curriculum can play an important part in the personal evolution of the under-graduate relativist. Having accepted the "revolutionary perception of the general relativism of all knowledge" (Perry), the student is ripe for the study of lasting human values and, for the first time, is able to evaluate critically the historical, socio-cultural, and individual contexts in which values and commitments are formed. The relativist, of all the categories of students discussed, can truly benefit from and contribute to inter-disciplinary discussions about social problems and world future. He is not only capable of dealing with the internal logic and methods of proof within any disciplinary perspective, but also of tolerating the many questions that disciplines can provide no answers to. As students begin to work out their own commitments through the study of the flow and fluctuation of values, they will also begin to confront what Perry calls "the dialectical logic in commitments" that is, the "paradoxical necessity to be both wholehearted and tentative."

Class Size. The size of a class is a highly significant factor from a developmental point of view. Obviously the size of the college or university will dictate, to some extent, the size of classes and the possibilities for student-teacher interaction. The faculty member teaching a class of 250 cannot be expected to get to know each student individually. However, developmental theory suggests that the most valuable learning takes place when the student is able to take an active part in the classroom process, that is, when one can challenge and be challenged by others, can participate in group problem-solving, can dream up and test hypotheses. The large lecture class, with little opportunity for questions, let alone discussion, is developmentally disastrous for some kinds of students.

The Perry dualist will feel comfortable with the lecture format but will tend to take class notes furiously so as not to miss the words of "truth" emerging from "authority's" mouth; he will not question and may never see the value of placing the "facts" of the course in a larger context or system of thought. The Perry multiplist may either begin to feel constrained by the lecture format and begin to cut class -- or will demonstrate the "cafeteria approach" to knowledge: "I'll take what appeals to me and forget the rest." The subjectivity and personal dogma of the multiplist cannot be challenged in a large lecture. And a relativist also needs a forum in which to discuss and critique the competing viewpoints he



is trying to evaluate. Thus, from the developmental perspective, virtually no one profits from large classes. Some would even argue that such "education" isn't education for development at all.

Assignments. When it comes to course planning, our findings suggest that most college teachers need to review the nature, number, and rationale behind specific assignments all the way from freshman year to senior graduation. Once students' developmental levels are known (if not individually, at least as a group), faculty must concern themselves with the degree of match or mismatch between their expectations of students and the students' actual development level.

For example, entering freshmen who are Perry dualists would be baffled by an essay question requiring a critique of two or more contradictory theories. Such questions are favorites in social science courses which thrive on disagreement. The dualist looks for certainty and expects the teacher to provide it. The allegedly more precise natural sciences may prove more attractive to the dualist than the messy, ambiguous, relativistic humanities.

A multiplistic student, faced with the same essay question (or reading assignment or discussion topic) selects what feels right and expresses little interest in conflicting views or evidence. The relativists in the class may find the assignment appropriately challenging, but their dualist and multiplistic colleagues may frustrate them, making discussion very difficult and tense. The pedagogical problem for the instructor with such a mixture of students at different points in their development is considerable.

Individually tailored assignments are one successful strategy for this situation -- class size permitting. Another is small group discussion of the student essays. The resulting exposure to other modes of thinking, the challenge to clarify one's own opinion, to tolerate others, to disagree productively -- all these experiences provide crucial stimuli for growth.

Advising. The advising process is all too often overlooked as an educational opportunity for the students and faculty involved. Most students view advising as a chance to discuss with an informed adult their explicit questions about academic decisions: how to select courses, to evaluate hearsay about teachers, to choose a major, to estimate graduate school possibilities, to make long term plans for employment.

But implicit questions are often present too. An unfocused student may be wondering, tacitly, how long he will be allowed to wander in the curriculum. A student with apparently definite career goals may be wondering if his choice is right or has come too early. The developmentally sophisticated advisor is often better able to help his students examine their own underlying assumptions. Complicated ironies can be involved. An unfocused student might turn out



to be developmentally advanced in Perry terms (that is, relativistic). His as yet uncertain commitment may stem from his rapidly growing appreciation for divergent perspectives on the world and from a blossoming of choices in his own life. If a parent or advisor pushes such a student too far too quickly toward commitment, he/she may alienate the student from the learning process itself.

Conversely, the student with clear-cut goals may be developmentally "lower" than his unfocused peer. His case could represent what developmentalist Erik Erikson calls "premature commitment," the result of an insufficiently examined life with few crises or doubts. For both types of students, the advisor must find a way to encourage developmentally sound self-scrutiny. Neither a routine application of curricular rules nor an uncritical acceptance at face value of what students say they want is healthy.

Extracurricular and Community Life. Developmental theory maintains that the most productive learning occurs in situations characterized by dynamic interaction between teacher and student and by "hands-on" practical experience with the subject matter. Since students spend far more time out of class than in, one might reasonably ask what kind of learning does the college encourage beyond the classroom? If faculty remain essentially anonymous to students, they cannot serve as role models of adult behavior in the intellectual or any other sense. Conversely, if students have opportunities to meet faculty outside of class, for discussion, play or community service, the knowledge and teaching/learning style that the teacher represents in the student's eyes will come to seem less abstract and more meaningful in a practical sense. In a small and flexible college such as Simon's Rock, where developmental principles are taken seriously, we have created opportunities for out-of-classroom student and teacher interaction. Small mixed groups of faculty and students in the same course meet out of class to discuss the teaching/learning process and the conflicts of interest and assumptions that may arise. Faculty and students work together on projects for the "good of the community," such as theatrical events, energy producing or conserving efforts, and campus land-use planning. Ad hoc discussion groups have been arranged to talk through current campus issues such as dormitory regulations, administrative actions, or anticipated changes in academic programs. For most undergraduates, the immediate environment, the campus itself, is of prime importance.

Perspectives on Women. This sequence serves as one specific curricular modification which was designed to involve students in a two-year program of study and personal exploration of the myths, facts, and assumptions about the relationship between men and women. The sequence of courses and "experiences" were planned to take into account the developmental status of students from the point of entrance to the end of the sophomore year. The early courses emphasize the need of younger students to identify the problem, to be "given permission" to focus on sex roles as a legitimate academic topic, to relate the new ideas to personal experience. Exercises in journal keeping, role playing, and group discussions of personal

experience are built into the first year courses. The second year courses involve students in more academically rigorous examination of sex bias in theory and research, primarily in the social sciences. The developmental issue here is the need to move students from the stage of uncritical acceptance of opinions to a closer, systematic evaluation of opinions, arguments and theories. At the end of the second year students are encouraged to move from thought to action, and a testing of commitments, by spending time in local community settings where women's issues are being addressed and dealt with (e.g., family planning clinics, rape centers, women's art collaboratives, parent education programs, etc.).

General Education. Based on our work with students, we have prepared a set of guidelines for a two-year course sequence which would be applicable for a variety of content issues in a general education program. The guidelines can be found in Appendix B.

### Faculty Development

Faculty participation in project activities has already been mentioned. The most productive outcome for faculty involved their changing perceptions of their students and their willingness to make modification in existing courses. Faculty development could have been enhanced had the project staff been able to work more closely with interested individuals.

The assessment component was complex and time consuming, and in retrospect its design appears too research oriented. While it will ultimately prove useful to have extensive longitudinal data and although the interviews themselves are a rich source of information about students and their reactions to the curriculum, such information comes too late in the course of a two-year project to have much impact during the project's lifetime. What appears to have had more impact on faculty involved the following: 1) exposure to a theory (Perry), 2) workshops on curricular issues with Perry as a framework, 3) sharing teaching strategies, 4) articulating goals and strategies within the framework of a theory, and 5) attempting minor modifications in individual courses.

Our view of the role of the student assessment program in faculty and curriculum development has changed as a result of our experience. Both faculty and curriculum development might have been enhanced (at least during the project's lifetime) had we considered two options: 1) changing the scope of the assessment, or 2) involving more faculty in the assessment procedures. Considering the first option it could be argued that simply training faculty in Perry's theory alone and allowing them to gain experience detecting developmental differences in their students can make the theory come alive and might lead quickly to adjustments in courses. The project directors and other core faculty could have provided the peer support.

Our own reactions to the value of the interviews leads us to favor the second alternative. Each of us felt that doing the in-

interviews was one of the most rewarding day-to-day aspects of the project. By relaxing some of the structure which a research model imposes, we could have recruited other faculty who would have found the experience equally rewarding. We could have gained reasonably precise longitudinal information and enabled more faculty and students to feel more closely involved with the project. Our own time could then have been spent working more closely with these faculty to monitor their use of the theory in effecting change in their courses. It would appear now that the possibilities for short-term impact could have been increased while the possibilities for long-term impact remain essentially unchanged or even enhanced.

In retrospect, making a new theory come alive is an important component of faculty development. Structured classroom observations and intensive interviews with students would have probably contributed to more faculty feeling that they were participating in an unusually fruitful and personally involving enterprise.

### Other Grant Activities

Admissions Interview and Checklist. During 1979-80, one of the project directors met regularly with staff of the Admissions Office at Simon's Rock to review developmental theory, the past studies and findings on the academic and social adjustment of Simon's Rock students to college, and the implications of the findings for admissions and student life. We have designed a new admissions interview (similar to the developmental interview used in the student assessment) which elicits information related to Perry and Loevinger stages. A checklist, used with the interview summarizes the interviewer's impression of the applicant in various areas, such as cognitive style, level and nature of academic motivation, assumptions about education and Simon's Rock, psychological maturity, prominent values and priorities, attitudes toward authority and law, and degree of self-reflection and insight. The interview and checklist are included in Appendix C. During the first year of its use, the information gathered on applicants will be analyzed to get a better sense of the differences between students we accept and reject and to track student performance as a function of characteristics noted in the admissions interview. The question usually arises if we intend to use such information to screen applicants. Although we will attend to the developmental information in the process of screening applicants for a while, it will be given no more weight than the usual admissions criteria, such as, SATs or high school record. However, we feel that the information will help us understand better the kinds of students who are likely to be attracted by the early college option. The rationale and early results of our developmental programming efforts in admissions were reported at the meeting of the National Association of Admissions Counselors in Detroit in October 1980.

National Educational Conference, January 1981. Educators, national policy-makers, and planners joined representatives from foundations, corporations, and accrediting agencies at Simon's

Rock in January 1981 for a three-day conference on educational restructuring. The conference, sponsored by FIPSE together with The Ford Foundation and The Braitmayer Foundation, was conceived as a result of the work at Simon's Rock, funded by FIPSE, to study the developmental needs of early college students. Workshops, panel discussions, speeches and planning sessions focused on ways in which diverse constituencies can work together on behalf of youth whose educational needs have outstripped the limited responses of traditional sequential schooling and standard curricula. Consensus was reached on the critical need to raise public awareness of optional programs and of the crippling effects on education of overregulation and entrenched institutional bureaucracies.

In response to a mandate of conference participants, Simon's Rock will seek funding to establish a Resource Center to offer consultation to schools and colleges seeking information on alternate structures for college-ready adolescents and other underserved populations, disseminate material on developmental education, and convene future conferences to maintain dialogue between the diverse public and private sectors.

More detailed coverage of the January conference rationale and resolutions for the future is included in Appendix D. A publication of the conference proceedings is available by writing Nancy Goldberger, Simon's Rock of Bard College, Great Barrington, MA 01230.

Dissemination. A list of papers which can be obtained by writing Nancy Goldberger appears in Appendix E.



CONFERENCE RATIONALE AND RESOLUTIONS FOR THE FUTURE

On January 13-15, 1981, Simon's Rock of Bard College, in co-operation with the Ford Foundation, the Fund for the Improvement of Postsecondary Education, the Braitmayer Foundation, and the Bard College Center held a conference, "The Case for Educational Restructuring," designed to re-examine the values and assumptions underlying the traditional structure of secondary and postsecondary education. The central concern of the conference was to make a case for educational restructuring and to consider possibilities for the formulation of a national, comprehensive youth policy which would foster access to higher education opportunities based on readiness rather than chronological age. The conference was unanimous and clear in seeing a need for such a youth policy to challenge the rigidities of an inadequate traditional structure which prescribes four years of secondary school prior to admission into a collegiate environment. Members of the conference pointed to the wastefulness of intellectual energies, time and money inherent in this traditional structure and to the need for exploration into new strategies to enhance the options for students to vary the pattern of their education. While the participants were cautious in moving toward the formation of a comprehensive youth policy, they were quick to see the need for a continuing and coordinated effort in this direction. What follows here is a brief description of the rationale for the conference and an outline of plans for future work resulting from this year's meetings. More complete discussions of specific issues are contained in the papers and remarks by conference participants in succeeding pages.

There are few generalizations in education that are universally agreed upon, but one of them is that people learn at different rates and possess differing aptitudes. It is critical to realize that present education systems and public policies, presumably dedicated to providing the best education for all students, are so structured that they block effective means to accommodate these differences.

While almost every other structure in the United States has been replaced or remodelled as modernization required, education has remained fundamentally unaltered. It is a sequence established without regard for structural integrity. Children enter at the bottom and emerge at the top prepared, presumably to enter the adult world. By implication each higher level is more important than the lower; and also by implication, the higher the level attained by the student the more important his worth as an individual. Hence the race to the top and the growing tendency to emphasize competence in stair-climbing at the expense of individual development and the true relationship between educational process and its desired goal, that all shall be matured along the way and made ready to take their places in the adult world. At a time when adolescents are reaching maturity earlier, the structure of education should be re-evaluated to more responsibly accommodate the changing needs of students.

Compounding the problem of structure is a series of curricula which do not respond to the rapidly changing educational needs of

students. As noted in the Carnegie Commission report on higher education (Less Time, More Options-1971) a deficiency of both high school and college is that two thirds of the last two years of high school and the first year of college in particular are repetitious. This fact suggests that we are wasting our students' time and talents. There is a tendency to encapsulate our youth in undemanding educational environments that reinforce many immature elements of their personalities. This together with a lack of guidance geared to the cognitive development of individual students produces a system which cannot accommodate excellence or identify educational needs. As a result, some of the most able students between the ages of 16 and 22 have helped to produce an astonishingly high drop-out rate in no small part due to boredom with unresponsive curricula.

Although there have been and continue to be isolated attempts to introduce greater flexibility in the educational structure, there remain obstacles to change from federal discrimination in scholarship guidelines to admissions bias in higher education related to age and degree completion. While resistance to change is largely based on a perceived economic self-interest, there is also a genuine lack of understanding among educators of the characteristics and needs of students who elect an early transition from high school to college. Imaginative leadership not bound to the traditional lockstep structure is required if significant options are to be developed.

From the Hutchins' venture at the University of Chicago to the current proliferation of programs such as the Gifted Students Program at the Johns Hopkins University and other early admissions programs opportunities have existed for a few select students to begin collegiate study before completion of high school. Developmental psychologists note that young people mature earlier and enter college more knowledgeable than did students in the past. But with few available alternatives, many of these students who mature early opt out of formal education completely. The research on changing adolescent needs is indeed meager and recommendations to meet these changes have been few and, thus, have not made an impact on national education policy. Several states have passed laws allowing "early-out" examinations for secondary students, but the significant number of students who drop out without official sanction is indicative of the failure to address the public policy question of viable options for young adults.

It has been argued that early admissions programs do indeed respond to the need of adolescents for more options in education. However, it should be noted that these options are largely elitist in that they are usually designed for gifted young people from middle to upper class families. Thus, they do not significantly impact educational and social programs that affect minorities or the economically deprived -- the very groups constituting a majority of young people who opt out of the conventional school sequence. The need to break the lockstep of an educational sequence which too often serves time rather than achievement has long been recognized by many; but if the break has occurred, it has not been to the benefit of the majority of those students who need it.



Thus, the conference participants addressed issues which challenged the values and assumptions of the traditional structure by proposing alternatives to it and by acknowledging the trend toward the diffusion of boundaries between high school and college.

To insure an effective conference, prominent national figures from business, government, public and private foundations and education were invited to offer their insights into issues of reform in education. Participants in the conference were selected from constituencies whose representatives are in a position to affect change or to be influenced by variations in the traditional structure. Those constituencies represented in the conference were college and university presidents, deans, and program heads; state education system representatives; foundation executives; tuition assistance groups; federal funding agencies; national association of colleges; national board members, and officials from existing alternative programs. The conference agenda and the work prepared for the conference by these participants is contained in the pages which follow along with specific program descriptions.

The conference generated a wealth of suggestions for future initiatives and numerous letters of positive response from participants and panelists. The most specific suggestion in addition to publishing the conference proceedings was to hold a second conference at Simon's Rock to continue the initial dialogue and expand the participants to include representatives from business and industry, teacher unions, parent organizations, and others. An additional and frequently mentioned recommendation from conference participants was that Simon's Rock in cooperation with other institutions develop a plan for a Resource Institute concerned with educational restructuring which would serve as an information, research and consultation center. Foundation representatives suggested brokering a proposal for funding such a center to several foundations.

In order to discuss further some of these suggestions, Nancy Goldberger of Simon's Rock, Wendy Shepard, Bard College Center, Janet Lieberman, LaGuardia Community College, Franklin Patterson, Center for Studies in Policy and Public Interest, University of Massachusetts, Daniel Yankelovich, Yankelovich, Skelly and White, and Arthur Greenberg, Middle College High School, met for an all-day session in New York City. The discussion was far-ranging and included consideration of varieties of resource centers and services. However, the consensus of the group was that Simon's Rock is in a unique position to lead a national conference concerned with the economic, social and technological changes that will contribute to the need for educational restructuring in the next two or three decades. Simon's Rock's record as a successful challenge to the educational structure and as a school that is responsive to the developmental needs of the students it serves places the College in a special and influential position in American education.

In view of this; it was suggested that Simon's Rock seek funding for a second conference on educational restructuring to be part of a

series of annual conferences on educational change. The content of this second conference would focus on serving the needs of new student populations: women, Hispanics, immigrants, and unemployed youth among others. The whole spectrum of educational agencies would convene to discuss the range of options available for the new students currently. Consistent with Peter Druckin's thesis that the demand for education is not declining, only the demand for traditional education, the conference would critique the programs currently available and make recommendations for the kind of programs that need to be developed for the new diversity. The core audience would include last year's participants as well as members of the corporate sector engaged in education. The conference would take place in June, 1982 at Simon's Rock.

A unique feature of the second conference and subsequent follow-up would be a series of regional conferences held during the year following the June conference. These regional conferences would be thematically related to the larger national conference, perhaps focused more on educational issues specific to the geographical region and population. A core planning committee would serve as consultants to supervise the regional conferences which would be organized by local organizations and personnel. It was suggested that some of the regional conferences might be organized through agencies such as the National Association of Secondary School Principals, and teachers unions. If the idea of an annual June conference is realized, these regional conferences could become a permanent feature. Funding for each national and regional conference sequence would vary, approaching different funding sources depending on the year's thematic focus.

Concomitant with the conference activities, and perhaps independently funded, would be the planning toward a more permanent Resource Institute on Educational Restructuring. During the 1981-82 year, a planning group will be established. During the initial planning year, the group can analyze and document the need for the continuing public discussion of educational change and restructuring. One suggestion was that this could best be accomplished by interviewing lay figures in education, industry and unions, etc. to begin to map out the variety of perspectives on American education in the future. This planning group would then describe the broad mandate, delineate the important issues around the topic of educational restructuring and make recommendations about the approach to best attack the need comprehensively. This blueprint document would then be used for further fund-raising to support activities of the Resources Institute. The planning group would also contract individuals to write two or three seminal articles on special issues related to change in the structure of education. These papers would also define the parameters of educational problems and outline potential strategies to address the discontinuity currently existing between providers and users of education.

## Appendix E

1. Goldberger, N., A. Marwine, J. Paskus. "The Relationship Between Intellectual Stage and the Behavior of College Freshmen in the Classroom. Paper presented at Eastern Psychological Association, 1978.
2. Goldberger, N. Developmental Assumptions Underlying Models of General Education. Paper presented at the Third Annual Metropolitan Conference on General Education and the Entering Learner, The William Patterson College of New Jersey, April 1979.
3. Goldberger, N. Meeting the Developmental Needs of the Early College Student: The Simon's Rock Experience, May 1980.
4. Goldberger, N. Educational Quality: Or Where is the Student in Educational Planning? Paper presented at the January 1981 Conference "The Case for Educational Restructuring: The Implications of Early College Readiness for National Youth Policy in Education," Simon's Rock of Bard College, Great Barrington, MA
5. A Case for Educational Restructuring, Proceedings from Conference at Simon's Rock of Bard College, January 1981

## SOPHOMORE INTERVIEW

Simon's Rock of Bard College

1. What stands out for you over the past two years (since you've been at Simon's Rock?)

Why is that significant?

Anything else?

2. Do you think that you have changed significantly since you have been here?

What have been the turning points?

What were you like before?

Do you now think about yourself or the world in new or different ways?

3. How would you describe yourself to yourself now?

4. What stands out for you as far as academics at Simon's Rock is concerned? Individual courses? Individual teachers? Other educational or academic experiences?

5. What is the best idea you've come across in the past two years? What have you gotten most excited by in your academic work?

6. What things would you most like to learn now? Why?

7. Are there any areas of study that you tend to avoid? Why?

8. Have you ever been in a class where there is some controversy on a topic, either between student and student, or student and teacher?

How do you react?

How do you decide what to think?

Is there any way of resolving disagreements such as these?

What if experts on some issue disagree?

9. What stands out for you as far as the non-academic side of campus life is concerned?

Do you think this changed you or the way you think about things?

10. How do you tend to handle things that bother you?  
Has your ability to cope with new situations, frustrations, problems, etc. changed since you've been here? Example?

11. Have you given any thought to what you will be doing during the next few years? ~~What are~~

What are your plans for next year?

What are your long-term plans, if any?

12. How do you see yourself changing in the future?

Do you have a sense of the issues you're going to have to work on (things about yourself you'd like to change)?

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Give following Perry/Wellesley items: (student reads aloud)

1. Good teachers don't like to give you all the right answers. They try to teach you to find the right answers on your own.

2. In math and science there are absolutes--things that are known to be true. But in other areas, like the humanities, there are no absolute answers. And in things like the social sciences the experts don't have the answers yet.

3. When I write a paper, I try to be fair to both points of view.

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Give Kohlberg dilemmas: Heinz and Officer Brown/Judge